



ACCREDITATION STANDARDS FOR ORAL AND MAXILLOFACIAL RADIOLOGY PROGRAMS

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Oral and maxillofacial radiology is that branch and specialty of dentistry concerned with the prescription, production and interpretation of diagnostic images for the diagnosis and management of diseases and disorders of the craniofacial complex.

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ACCREDITATION STANDARDS ORAL AND MAXILLOFACIAL RADIOLOGY PROGRAMS

The Commission on Dental Accreditation of Canada

The Commission on Dental Accreditation of Canada (CDAC) is a partnership with membership from the public and organizations representing oral health care professionals, educators who prepare them and regulators responsible for their competence and continuing safe practice. CDAC, in consultation with its partners, develops and approves standards for educational programs preparing dentists, dental specialists, dental interns/residents, dental hygienists and dental assistants. CDAC also develops and approves standards for institutional dental services. CDAC reviews educational programs and dental services by means of structured, on-site visits following receipt of submissions presenting detailed information in the required format. Programs and services meeting or exceeding the standards are granted accredited status.

Vision

We are the recognized leader in the accreditation of oral health education.

Mission

We set standards and accredit oral health professional programs to promote quality education and practitioner readiness.

Basic Process

The starting point within accreditation is CDAC's development, approval and ongoing revision of accreditation standards. Educational programs and dental services are invited to apply for review against current standards. Programs applying submit detailed documentation outlining evidence addressing the accreditation standards. A survey visit is then arranged, and an accreditation survey team conducts interviews with faculty members, residents and other stakeholders to secure additional information. This process clarifies issues arising from the submission and generally verifies that the documentation reflects the program or service. The survey team submits a report to CDAC. CDAC then determines the eligibility of the program or service for accreditation.

Responsibilities of Accredited Programs or Services

Programs or services invite CDAC to conduct a review to assess eligibility for accreditation. Once initially accredited, CDAC notifies programs or services when reassessment is required in order to maintain accredited status.

Programs or services must submit reports to CDAC as requested following an accreditation survey. Programs or services must also, on their own initiative, inform CDAC, in writing, of any significant changes, completed or pending, in supporting facilities, resources, faculty member complement, curriculum or structure.

CDAC requires the cooperation of programs in studies related to the improvement of the accreditation process. Educational programs are expected to cooperate in completing CDAC's

Annual Program Review.

Clarification of Terms

Particular attention should be paid to the wording of each standard. For example, a standard may take the form of either a “must” or a “should” statement. There is a significant difference between the two. “Must” statements reflect the importance of a particular standard. CDAC defines the terms as follows:

Must; Shall; CDAC expects;

These words or phrases indicate standards that are *essential or mandatory*.

Should:

This word implies that compliance with the standard is highly desirable.

May or Could:

These words imply freedom or liberty to follow a suggested alternative to the standard.

Levels of Knowledge

In-depth: A thorough knowledge of concepts and theories for the purpose of critical analysis and the synthesis of more complete understanding.

Understanding: Adequate knowledge with the ability to apply.

Familiarity: A simplified knowledge for the purpose of orientation and recognition of general principles.

Exposure: The level of skill attained by observation of / or participation in a particular activity.

Curriculum Approach

Competency Based Education (CBE), Evidence Based Education (EBE) and Outcomes Based Education (OBE) are terms applied to educational programs which build curriculum, resident learning experiences, and evaluation methods from documents that describe the knowledge, skills and values that a resident must possess to graduate. These documents include descriptions of the competencies required of an entry-level dental specialist.

Programs preparing health practitioners must also include consideration of the cognitive (foundation knowledge), the affective (values associated with professional responsibility) and psychomotor (preclinical and clinical). Abilities may be expressed through competencies or learning outcomes.

The accreditation process reviews how individual competencies are taught and evaluated and how the program ensures that each and every graduate has achieved every competency. This principle is the foundation of the accreditation process.

Respect for Educational Innovation and Autonomy

CDAC strives to ensure that its accreditation standards and processes do not constrain innovation or program autonomy. The expertise of educators in the development and implementation of educational programs, curriculum and learning experiences is fully acknowledged. For this reason, CDAC places its emphasis upon assessment of the program's ability to meet its stated objectives and outcomes.

0.0 PROGRAM INFORMATION

0.1 Provide the following information:

- a. Name of Institution
- b. Mailing and website addresses
- c. Telephone and fax numbers, email address(es) and the name of the survey visit coordinator
- d. Name of President or Chief Executive Officer along with telephone number
- e. Name of Dean or Director along with telephone number
- f. Name of Program Head or equivalent along with telephone number
- g. Date program was established
- h. Provincial authority under which the institution operates
- i. Program length
- j. Name of the Privacy Officer and the position job description

0.2 If the CDAC accredited dental specialty program has established a Dental Specialty Assessment and Training Programs (DSATP) for dental specialists from non-accredited programs to be eligible for certification and licensure in Canada (either “on-site” or at an affiliated institution) the program must provide the documentation requested in Appendix A.

1.0 INSTITUTIONAL STRUCTURE

Standard

1.1 CDAC requires that an advanced or dental specialty program must be sponsored by a faculty/school/college of dentistry located within a university which is properly chartered and licensed to operate and offer instruction leading to a degree, diploma or certificate. All other educational programs offered by the university eligible for accreditation by CDAC must be accredited. A hospital that provides a major component of an advanced dental education program must have its dental service accredited by CDAC. It is expected that the position of the program in the administrative structure will be consistent with that of other comparable programs within the institution. There must be provision for direct communication between the program and the parent institution regarding decisions that directly affect the program. Faculty members should have the opportunity to participate on university committees.

Documentation Required

- a. Attach as an appendix, the senior organizational chart of the university (include the names of the individuals currently holding these positions).
- b. Attach as an appendix, an organizational chart of the program.
- c. Attach as an appendix, the terms of reference for the decision making body that oversees the program.
- d. Attach as an appendix, a list of all educational programs, eligible for accreditation by CDAC.

- e. Attach as an appendix, a list of university committees in which faculty members participate.

Standard

- 1.2 The program must define its own mission statement, consistent with that of the parent institution, the faculty/school/college of dentistry or faculty of graduate studies.

Documentation Required

Provide a copy of the mission statement or equivalent for the parent institution and a copy of the mission statement or equivalent for the program.

Standard

- 1.3 Specific program objectives and outcomes must be consistent with the mission statement.

Documentation Required

Provide a copy of the program's objectives and outcomes.

Standard

- 1.4 The parent institution must recognize the unique costs involved in dental education. Documentation must be submitted providing revenue and expense data for the program.

Documentation Required

- a. Describe the procedures used in determining the budget of the program.
- b. Attach as an appendix, a copy of the current program budget including details of revenues and expenditures.
- c. Describe any significant changes in the budget over the past five (5) years.
- d. Comment on the adequacy of the present budget.
- e. Describe the process for the replacement of old/or the purchase of new equipment and resources.
- f. Describe the process and rationale used to establish clinic fees, if applicable.

Standard

- 1.5 The program must establish structures and processes for ongoing planning, evaluation and improvement of the quality of the program. Membership and terms of reference for committees must be established and published, recognizing that the parent institution has ultimate responsibility and authority. Committees should include representatives from the specialty program, residents and, where appropriate, qualified individuals from the parent institution and the profession.

Documentation Required

Describe the committee structures and processes that provide for ongoing planning, evaluation and improvement of program quality. Attach as an appendix, the membership, terms of reference and frequency of meetings of these committees.

Standard

- 1.6 The program must evaluate the degree to which its objectives and outcomes are being met through a formal process. Results of this process must be used to improve program quality.

Documentation Required

Describe the process(es) used to evaluate the program relative to its stated objectives and outcomes and identify how this process is used to improve program quality.

Standard

- 1.7 The parent institution may seek financial support from external sources. External contracts must not compromise the program's stated objectives and outcomes or restrict the research requirements established by the parent institution. To eliminate any perception of bias or breach of ethics that may be a consequence of accepting and administering such funds, the parent institution must involve program administration and maintain transparency in relation to the process to seek external funding sources and any conditions attached to the acceptance of such funds. External funding must not determine the selection of residents, design and content of the curriculum, choice of techniques and materials used in teaching and the appointment of academic or administrative staff.

Documentation Required

Describe the impact of external funding on resident selection, program curriculum, the selection of teaching materials and academic appointments.

2.0 EDUCATIONAL PROGRAM

2.1.0 Admissions

Standard

- 2.1.1 Admission must be based on specific selection criteria, which must be established and published prior to the consideration of applicants. The criteria must be readily available to advisors and applicants, and be applied equitably during the selection process. The program must be involved in establishing these criteria. Selection criteria should encourage recruitment of a diverse resident population with appropriate academic preparation and aptitude.

Documentation Required

- a. Describe the admissions process.
- b. Identify the individual(s) primarily responsible for admissions.
- c. Attach as an appendix, the application information provided to potential applicants.

Standard

- 2.1.2 An admissions committee must be established to select candidates for admission to the program. This committee should include representatives from the program as well as other individuals who are qualified to define and evaluate admissions procedures and criteria.

A candidate's previous academic performance should not be the sole criterion for admission. Admissions committees should consider non-academic criteria in the overall assessment of applicants for admission. The process should employ tests and measurements designed to select residents who have the capacity for success in the program. For applicants whose primary language is not the language of instruction in the institution, language proficiency should be considered in the admissions process.

Documentation Required

- a. Describe the role of the admissions committee. Include the membership and terms of reference for this committee.
- b. Identify the language proficiency examination used for applicants whose primary language is not the one of instruction and describe how is it used in the admissions process.
- c. Describe any changes to the admissions process since the last accreditation visit.
- d. Describe the selection interview used in the admissions process.

Standard

- 2.1.3 CDAC encourages participation in, and the development of, mechanisms and studies designed to retain residents.

Documentation Required

Provide data for the last five (5) years regarding resident attrition and the reasons for withdrawal or dismissal.

Standard

- 2.1.4 It is recognized that a resident may transfer, with credit, from one accredited program to another. If the program accepts such transfer residents, the program must ensure that transfer residents are admitted into the appropriate year to permit the residents to meet program outcomes.

Documentation Required

If the program accepts transfers residents from other accredited programs, attach as an appendix the established criteria used for the admission of transfer residents.

Standard

- 2.1.5 The assessment criteria for residents admitted with advanced standing based on credit for courses taken at a non-accredited program must be consistent with the admission requirements.

Documentation Required

If the program accepts advanced standing residents from non-accredited programs, attach as an appendix, the criteria for admission.

Standard

- 2.1.6 The number of residents enrolled in the program must be proportionate to the resources available. These resources include adequate physical facilities, faculty members and support staff and availability of patients.

Documentation Required

- a. Using the format below as a guide, indicate the current number of residents enrolled in the programs at the institution.

	Male	Female	Total
First year			
Second year			
Third year (if applicable)			
DDS/DMD & International students			
Other specialty programs			
Total			

- b. Comment on the adequacy resources to support current program enrollment.

2.2.0 Curriculum Management

Standard

- 2.2.1 The program must have a written plan for the ongoing review and evaluation of the curriculum, which includes:
- Defined outcomes of the program.
 - A mechanism for the input from faculty members, residents, administrators, the curriculum committee and other appropriate sources.
 - A mechanism for the evaluation of all courses describing how they contribute to the program outcomes.
 - A mechanism to ensure the incorporation of evidence-based practice and emerging information.

Documentation Required

Describe the program's curriculum management plan including:

- The ongoing curriculum review and evaluation process used by the program.
- How input is obtained from faculty members, residents, administrators, the curriculum committee and other appropriate sources.
- How decisions involving curriculum are made; and how the program ensures that curriculum decisions are consistent with the program's stated objectives and outcomes.
- The process used to implement curriculum revisions.
- The mechanism used to incorporate evidence-based practice and emerging information.
- Copies of minutes of the curriculum committee or equivalent and resident evaluation of instruction must be available on-site.

Standard

- 2.2.2 Written documentation of the curriculum must be provided to residents at the beginning of each course. This documentation must include course descriptions, content outlines, course objectives and outcomes, learning activities and evaluation procedures.

Documentation Required

Describe when residents receive written information and what type of information is provided to residents about the courses.

Standard

- 2.2.3 Teaching methods and resident learning activities must be effectively integrated and coordinated so that residents' educational experiences are comprehensive and promote their ability to demonstrate decision-making and critical thinking skills.

Documentation Required

Provide a concise description of the teaching methods and learning activities used in the program.

Standard

- 2.2.4 A process must be established to ensure that residents meet the published and distributed cognitive, affective and psychomotor (preclinical and clinical) objectives and outcomes. Institutional due process policies with respect to academic standards must be followed.

Documentation Required

Provide a copy of the program's academic and due process policies.

Standard

- 2.2.5 CDAC recognizes that extramural educational experiences and internal rotations to specific disciplines and other health related settings are essential and are required to complement the existing core program within the institution. Scheduling must be done to ensure that resident progress within the core program is not compromised by these experiences and rotations.

Documentation Required

Describe the types of extramural experiences and internal rotations established and how they are scheduled.

2.3.0 Curriculum Content

Standards 2.3.1 to 2.3.19

- 2.3.1 CDAC recognizes that there may be various patterns for advanced or specialty education; however, education in oral and maxillofacial radiology is three (3) consecutive academic years, including a minimum of two (2) years of clinical education. A full academic year is deemed to be eleven (11) months.
- 2.3.2 The graduate/postgraduate program provides advanced education experience beyond the undergraduate level. It is expected therefore that courses will be taught at a greater depth and breadth than in the undergraduate curriculum. Basic, clinical and behavioural science instruction must be integrated and of sufficient scope, timeliness, quality and emphasis to ensure that graduates meet the program's stated objectives and outcomes. Particular attention must be given to the interrelationship of subjects, especially to the application of the basic sciences to the clinical subjects, so that the program comprises a related body of knowledge rather than a collection of individual and separate subjects. Graduates must be prepared to assume a level of professional responsibility appropriate to a postdoctoral educational program, within the scope of practice of the specialty. Graduates must

understand their responsibility to the referring practitioner and patient, with emphasis on professional courtesy and communication.

- 2.3.3 The basic, clinical and behavioural sciences although taught in the undergraduate years, are constantly evolving and residents must be made aware of recent advances in order to better understand the fundamentals of practice.
- 2.3.4 Basic and clinical sciences instruction must be designed to be relevant to the specialty discipline and to the clinical management of the patient, including a variety of clinical experiences. Emphasis must be placed upon thoroughness of patient evaluation and accuracy in diagnosis, treatment planning, and in the treatment of both routine and complex cases. Program instruction may consist of formal courses and/or seminars, conferences, reading assignments, hospital rounds and assignments in the laboratories, which are carefully organized. The objectives and content, if presented in this fashion, must be reviewed by the program director to avoid deficiencies and/or unnecessary repetition.
- 2.3.5 Consultation with members of other specialty areas of dental practice is required and offering of joint seminars is encouraged. Assignment of residents to other graduate/postgraduate clinics should be fostered so that they may observe modes of treatment related to their field. Observation of faculty members in the private practice setting is desirable.
- 2.3.6 Participation in teaching is a learning experience for the resident as it enhances the ability to organize and evaluate material and communicate information to others. The resident must be assigned to teach in the institution's programs and encouraged to participate in table clinics, seminars, demonstrations, or lectures. Participation as both clinician and resident in the institution's continuing dental education program is also recommended. However, this participation must not interfere with the core graduate/postgraduate program.
- 2.3.7 The program must ensure resident participation in a research experience related to the specialty of oral and maxillofacial radiology either in a clinical or laboratory research topic as both an investigator and author.
- 2.3.8 The program must ensure that the resident is able to write a scholarly paper to a standard for publication in a referred journal.

Basic Sciences

- 2.3.9 Instruction in the basic sciences must:
 - a. Provide comprehension in greater scope and depth than achieved in undergraduate education with particular emphasis on fundamental principles and recent advances.
 - b. Emphasize the interrelationships among the basic sciences and correlate them with clinical practice.
 - c. Permit the resident to develop the capacity for objective analysis and critical evaluation of scientific information.

Clinical Sciences

2.3.10 Instruction in the clinical sciences must:

- a. Enhance the resident's diagnostic acumen and clinical judgment in the diagnosis and planning of treatment for conditions more complex than those encountered in the undergraduate experience,
- b. Emphasize the need for basing clinical judgments on evidence-based medicine and dentistry, where available.
- c. Ensure that treatment in the field of specialization is appropriately related to the dental and general needs of the patient.

Specialty Program

2.3.11 Graduate/postgraduate instruction can be gained through a variety of educational settings. The following list does not represent course content, but rather the necessary knowledge, skills and behaviours within the scope and depth required for a specialty program:

Competent in:

Advance Radiologic Interpretation
Diagnosis and Physical Evaluation
Head and Neck Anatomy
Imaging Modalities
Literature Review and Scientific Writing
Oral and General Pathology
Radiation Biology
Radiation Dosimetry
Radiation Physics
Biostatistics, Bioethics and Research Methodology
Epidemiology
General and Oral Pathology
Hospital Protocol
Jurisprudence and Medicolegal Ethics
Oral Medicine
Pharmacology and Therapeutics
Physiology
Embryology and Genetics
Growth and Development
Microscopic Anatomy

Associated Subjects:

Anxiety and Pain Control
Behavioural Sciences
Biochemistry
Dental Photography
Forensic Odontology
History of Oral Radiology
Management of Medically Compromised Patients

Medical Emergencies
Microbiology and Immunology

- 2.3.12 The special knowledge and skills and the critical judgment required of an oral and maxillofacial radiologist necessitate extensive clinical practice. The clinical material must be of sufficient quantity and variety to provide the broad range of learning experiences essential to the oral and maxillofacial radiologist's education. The resident must work cooperatively with consultants and clinicians in other dental specialties and health fields. Clinical experiences must be provided to develop competency.

Graduates of the program must be competent to:

- a. Conduct a clinical examination, take and evaluate medical and dental histories, and prescribe appropriate imaging investigations, produce and supervise the production of images required for diagnosis.
- b. Practice and advise on radiation protection and safety.
- c. Use image processing software programs to produce diagnostic images for analysis and interpretation.
- d. Analyze and interpret diagnostic images.
- e. Prepare written reports.
- f. Communicate effectively with patients and colleagues.
- g. Critically evaluate the scientific literature in order to maintain continuing competency in oral and maxillofacial radiology.

Residents must write reports on an adequate range of images of sufficient variety to be competent, as graduates, in clinical oral and maxillofacial radiology.

Clinical oral and maxillofacial radiology case conferences must be held weekly.

2.3.13 Oral and Maxillofacial Imaging Techniques

Experiences in oral and maxillofacial imaging techniques must be provided to the residents with adequate instruction and supervision.

Graduates must be competent in the routine and special procedures performed in oral and maxillofacial radiology including, but not limited to:

- a. Intraoral radiography
- b. Panoramic imaging
- c. Skull and cervical spine imaging
- d. Cone beam volumetric tomography
- e. Sialography

Graduates must be competent in the application and interpretation of the above procedures and:

- a. Computed tomography
- b. Magnetic resonance imaging
- c. Nuclear medicine

2.3.14 Associated Medical Sciences

The program must provide advanced education in head and neck anatomy, general pathology and oral and maxillofacial pathology, and related areas of oral medicine.

2.3.15 Evaluation and Radiologic Management of Patients

The program must provide residents with experiences in the clinical manifestations of oral and systemic diseases.

Residents must attend head and neck imaging rounds provided by medical radiology departments.

Graduates must be competent in prescribing appropriate diagnostic imaging studies.

Oral and maxillofacial radiology residents must not spend an excessive portion of their clinical education in the routine activities of a screening/emergency or treatment planning clinics.

2.3.16 Medical Imaging

The practice of oral and maxillofacial radiology calls for the association, cooperation and frequent consultation with medical radiologists. Familiarity with the broad scope of diagnostic imaging is important. The program must provide for a meaningful period of education in medical imaging in an active, hospital-based medical imaging department or other similar facility of, at least, three (3) months duration, or its part time equivalent.

2.3.17 Radiation and Imaging Physics

Graduates must understand the fundamental physics of:

- a. Film-based and digital oral and maxillofacial imaging
- b. Computed tomography, including cone beam volumetric tomography
- c. Magnetic resonance imaging
- d. Ultrasound imaging
- e. Nuclear medicine

2.3.18 Radiation Biology

Graduates must understand the biological effects of ionizing radiations.

2.3.19 Radiation Protection

Graduates must understand the application of radiation protection and/or hygiene for patients, support staff, and the design and construction of the imaging facility.

Graduates must understand administrative procedures required of the directorship of an

oral and maxillofacial radiology facility.

Documentation Required for 2.3.1 to 2.3.19

- a. Attach as an appendix, the timetables of each year of the program.
- b. Attach as an appendix, a list of all courses, by year and semester/term, offered by the program. For example:

<u>Course</u>	<u>Year</u>	<u>Semester</u>
Dent 101	I	Fall

- c. Attach as an appendix course outlines for all courses in the program. The description of each course must include:
 - 1. Course title, number and academic year offered
 - 2. Number of: lecture hours, laboratory hours, clinic hours, seminar hours, other instruction hours and total course hours
 - 3. Academic unit responsible for the course
 - 4. Names of instructors
 - 5. Course objectives and outcomes
 - 6. Content outline
 - 7. Evaluation procedures
 - 8. Required texts and materials
 - 9. Instructor/resident ratios in the course (e.g. lectures, laboratory, clinic and seminar sessions)
- d. Attach as an appendix, a document that shows the relationship between course content and the program's objectives and outcomes.

2.4.0 Preparation for Practice

Standard

- 2.4.1 A graduate of the program must be capable of meeting the dental health needs of the public as a specialist in oral and maxillofacial radiology. Sufficient opportunity for the development of competency in the specialty of oral and maxillofacial radiology must be provided. There must be a sufficient supply of patients with disorders requiring a wide variety of oral and maxillofacial radiology services in order to provide adequate clinical experience. Accordingly, the graduate must be capable of diagnosing and understanding the treatment implications of diseases, as defined by the scope of the specialty. Clinical experience must be such as to produce a graduate who can assume the level of professional responsibility appropriate to the specialty practice of oral and maxillofacial radiology and provide those services usually provided in the practice of oral and maxillofacial radiology.

Documentation Required

- a. Describe how the program manages patient assignment.

- b. Describe how resident's clinical experiences are monitored.
- c. Describe how the program ensures that each resident is provided with sufficient experiences to develop competency within the contemporary scope of oral and maxillofacial radiology practice.

Standard

- 2.4.2 An appropriate patient pool must be available to permit residents to demonstrate competency within the scope of oral and maxillofacial radiology. The availability of such experiences must be monitored to ensure adequate experiences for each resident. An ongoing record of the number and variety of experiences accomplished by each resident must be maintained.

Documentation Required

- a. Provide evidence that the patient pool available for educational purposes is sufficient to allow residents to develop competency within the scope of the oral and maxillofacial radiology practice.
- b. Describe the strategies that have been implemented to ensure that residents have sufficient patient experiences.
- c. Identify any areas where a shortage of patients may exist. Describe the strategies that have been implemented to address these areas.

Standard

- 2.4.3 Residents must have opportunities to work with other health care professionals.

Documentation Required

Describe the opportunities available to oral and maxillofacial radiology residents to gain experience working with physicians and other health professionals.

2.5.0 Evaluation

Standard

- 2.5.1 Reliable and valid systems of resident evaluation must exist and be applied. Processes must be defined which ensure that residents are individually evaluated in terms of their achievement of the program's stated objectives and outcomes. These evaluation systems must be the basis for judgements that govern resident promotion and graduation.

Documentation Required

- a. Describe the resident evaluation system(s).
- b. Describe how the program ensures that residents are evaluated in terms of their achievement of the program's stated objectives and outcomes.
- c. Describe how residents receive formative evaluation.

- d. Describe how residents are involved in providing feedback regarding the evaluation system.
- e. Attach as an appendix, the results of the Canadian National Dental Specialty Examinations, administered by the RCDC, for graduates of the program since the last accreditation survey visit.

3.0 ADMINISTRATION, FACULTY AND FACULTY DEVELOPMENT

3.1.0 Program Administration

Standard

- 3.1.1 The dean or director of the faculty/school or college of dentistry must be an individual who has the educational background, professional experience, authority and responsibility necessary to fulfill program objectives and outcomes.

Documentation Required

Attach as an appendix, the job description of the dean or director of the faculty/school/college of dentistry.

Program Director

Standard

- 3.1.2 For the purposes of the accreditation documentation CDAC regards the program director as the individual with responsibility and authority for the clinical academic program.

The program director must be a recognized licensed/registered specialist in oral and maxillofacial radiology, in the province they are active/teaching as Program Director, and have the professional experience, authority and responsibility necessary to fulfill the program objectives and outcomes.

The program director must have the necessary time to oversee program administration, operation, supervision, evaluation and revision. Teaching contact hours must not compromise the ability to fulfill these obligations.

Documentation Required

- a. Attach as an appendix, a brief curriculum vitae and a copy of the job description for the program director.
- b. Attach as an appendix, the teaching contact hours of the program director and the teaching contact hours of other faculty members in the discipline.

Standard

- 3.1.3 When a new program is being planned, the program director or equivalent should be appointed in advance of the program starting date to allow time for developing curriculum, recruiting faculty members, preparing facilities, ordering equipment, making clinical program arrangements and establishing admission procedures.

Documentation Required

If the program is a new program, identify when the program director was appointed.

3.2.0 Faculty and Faculty Development

Standard

- 3.2.1 The professional education of the faculty members, their preparation and experience for clinical practice, teaching and research must be adequate to meet the stated objectives and outcomes of the program. There must be mechanisms for the appointment, review and reappointment of faculty members, including those with administrative positions. One (1) or more program faculty members must be Fellows of the Royal College of Dentists of Canada (RCDC) in oral and maxillofacial radiology.

Documentation Required

- a. List alphabetically the names of all full time, half time and part time faculty members teaching in the specialty program.
- b. Provide on-site the current curricula vitae of these faculty members.
- c. Attach as an appendix, the mechanisms for the appointment, review and reappointment of full time faculty members, including those with administrative positions.
- d. Describe the review and appointment/reappointment process for half time and part time faculty members.
- e. Identify the number of program faculty members who hold Fellowship in the RCDC.

Standard

- 3.2.2 The number and distribution of faculty members must be sufficient to meet the program's stated objectives and outcomes. Resident contact time must allow the faculty members sufficient time for:
- a. Teaching preparation.
 - b. Resident evaluation and counselling.
 - c. Development of subject content and appropriate evaluation criteria.
 - d. Program development and review.
 - e. Professional development.

Documentation Required

Comment on the adequacy of the faculty member complement to meet the program's stated objectives and outcomes. Identify specific areas where there is insufficient coverage and the strategies implemented to address these areas.

Standard

- 3.2.3 An appropriate balance of faculty member involvement in teaching, research, scholarly activity and service must exist.

Documentation Required

Describe how the balance of faculty member expectations and involvement in teaching, research, scholarly activity and service is established.

Standard

- 3.2.4 A process must be in place for faculty evaluation that measures the performance of faculty members relative to their expectations and involvement in teaching, research, scholarship and service.

Documentation Required

Describe the process in place for evaluation of faculty member performance.

Standard

- 3.2.5 Faculty member to resident ratios must be adequate to ensure that neither resident learning nor the health and safety of patients are compromised.

Documentation Required

Comment on the adequacy of faculty/resident ratios in each of the following areas: teaching, research supervision, laboratory, clinic and seminar sessions.

Standard

- 3.2.6 Faculty members must be involved in continuing professional development. The program must show evidence of an ongoing faculty development plan.

Documentation Required

- a. Describe the professional development opportunities available to faculty members.
- b. Describe the budget support available for professional development opportunities.
- c. Describe how faculty members are supported or encouraged in these initiatives.

Standard

- 3.2.7 There must be opportunities for faculty members to meet on a regular basis to discuss program issues.

Documentation Required

Outline how often faculty meetings are held and provide (on-site) copies of the minutes for the last two (2) years.

Standard

- 3.2.8 The program must have a process to calibrate faculty members with respect to the consistent evaluation of residents.

Documentation Required

Describe the program's calibration activities and the strategies implemented to measure the effectiveness of these activities.

4.0 EDUCATIONAL SUPPORT AND SERVICES

4.1.0 Physical Facilities

Standard

- 4.1.1 Physical facilities and equipment must be adequate to support the didactic, laboratory and clinical objectives of the program. The adequacy of facilities will be evaluated in relation to availability and resident enrollment. If other programs utilize the same facilities, the program must provide evidence that the existing facilities are sufficient to meet the needs of the program.

Residents must have access to a radiographic facility with adequate supervision for the comprehensive examination, diagnostic imaging and management of patients.

Documentation Required

- a. Attach as an appendix, a floor plan of the program facilities, including the number and capacity of lecture rooms, clinics, laboratory facilities and locker space. Identify any areas in which there is insufficient space.
- b. Specify the number of:
 1. Dental x-ray units
 2. Extra oral medical x-ray units
 3. Panoramic and cone beam volumetric tomographic units available for the program

- c. Describe any additional radiographic imaging facilities available to the program.

Standard

- 4.1.2 Didactic, clinical and other program facilities should ideally be located in reasonable physical proximity to one another.

Documentation Required

- a. Describe where all teaching, clinical and research activities and instruction occur.
- b. Describe how clinical facilities are shared with other programs, if applicable.
- c. Identify areas of the physical facilities that should be improved in order to enhance the program.

Standard

- 4.1.3 It may be necessary in some instances for the program to use an off-campus facility. Specific standards for administration, faculty members, facilities, patients and instruction must be identified. Policies and procedures for operation of any off-campus clinical facility must be consistent with the objectives/outcomes of the program. A formal agreement between the educational institution and any agency or institution providing the off-campus facility must be current, negotiated, confirmed in writing and signed by both parties. Such agreement(s) must include clearly defined provisions for renewing and terminating the agreement to ensure program continuity. The program administrator must retain authority and responsibility for instructional requirements and assignment of residents.

Documentation Required

- a. Describe off-campus resident clinical experiences and include information on the location, arrangements for supervision, evaluation, length of time each resident is assigned and the types of patients and the treatment provided.
- b. Provide a list of the affiliation agreements between the institution and any agency or site where residents receive off-site experiences.

Standard

- 4.1.4 Adequate space must be available for faculty members and secretarial and clinical support staff. The location and size of offices should be conducive to the effective use of faculty and staff time and program resources for teaching preparation and resident counselling. Space must be available for storage of office, clinical, research and laboratory supplies and equipment, instructional media and resident, patient and program records.

Documentation Required

Describe the office and storage space and comment on the adequacy.

Standard

- 4.1.5 The institution must make provision for the acquisition and/or replacement of clinical and laboratory equipment, supplies, reference materials and teaching aids.

Documentation Required

Describe the program's plan for the repair and/or replacement of clinical and laboratory equipment, supplies, reference materials and teaching aids.

4.2.0 Learning Resources

Standard

- 4.2.1 A professionally administered library must be available. The library must be accessible to both residents and faculty members during and after scheduled hours of instruction and/or via electronic format.

Documentation Required

Please describe the library and its adequacy with respect to the program.

- a. Identify the individual(s) and their qualifications who administer the library that supports the program.
- b. Have available on-site a complete list of the currently held dental related and diagnostic imaging journals.
- c. Comment on resident access to the library resources.
- d. Describe resident access to electronic journals.

Standard

- 4.2.2 The library must be responsive to and supportive of the teaching and research activities of the program. CDAC encourages development and use of computerized/electronic methods of information retrieval.

Documentation Required

- a. Describe the ways in which the library is responsive and supportive of the teaching and research activities of the program (e.g. acquisition process for books and journals).
- b. Describe how the faculty members promote resident use of available library resources.

Standard

- 4.2.3 Residents and faculty members must have access to electronic and other multimedia resources.

Documentation Required

Describe how the program provides access to electronic and other multimedia resources.

4.3.0 Didactic and Clinical Support

Standard

- 4.3.1 Resident learning must not be compromised by an over-reliance on residents to provide institutional service, clinical productivity solely to enhance revenue, teaching and/or research, which cannot be justified as an educational requirement of the program. Teaching clinics must provide the necessary supplies and equipment required for patient comfort and safety.

Documentation Required

Describe resident obligations to provide instructional, treatment and/or support services within the program. Provide evidence that there are adequate documented protocols to ensure resident and patient safety.

Standard

- 4.3.2 Sufficient qualified support personnel must be assigned to the program to support both instruction and patient care. Adequate administrative, secretarial, clerical and other support staff must be available to assist faculty members and residents to meet program objectives and outcomes. Adequate maintenance and custodial staff must be available.

Documentation Required

Describe the number and types of support staff assigned to the program and comment on adequacy.

4.4.0 Resident Issues

Standard

- 4.4.1 Residents must have rights, responsibilities and privileges comparable with those of other residents at the institution.

Policies must exist concerning resident representation on appropriate committees.

The program must have methods to identify and address resident concerns.

Documentation Required

- a. Provide copies of documentation supplied to residents describing their rights,

- responsibilities and privileges. Comment on the adequacy of facilities available for resident use (i.e. learning resources, lounge, cafeteria, washrooms, lockers, health clinic, day care, etc.).
- b. Attach as an appendix, policies concerning resident representation on appropriate committees.
 - c. Describe the process(es) in place to identify and address resident concerns.

Standard

- 4.4.2 There must be an institutional policy which provides for due process for residents with respect to grievances.

Documentation Required

Describe or attach as an appendix, the institution policy that provides for due process if a resident has a grievance.

Standard

- 4.4.3 Residents must have an opportunity to participate in the evaluation of the teaching effectiveness of faculty members.

Documentation Required

Describe resident participation in the evaluation of the teaching effectiveness of faculty members.

Standard

- 4.4.4 Resident membership and participation in provincial/national dental and dental specialty organizations should be encouraged.

Documentation Required

Describe how resident membership and participation in provincial/national dental and dental specialty professional organizations is encouraged.

Standard

- 4.4.5 Counselling and health services must be available to all residents.

Documentation Required

Describe how residents access counselling and health services.

Standard

- 4.4.6 Prior to admission, residents should receive information concerning expected costs of the

program. This information should include estimates of living expenses and educational fees.

Documentation Required

Describe how residents are provided with information related to the costs of graduate education and provide, as an appendix, a copy of the information provided to residents.

5.0 CLINIC ADMINISTRATION

5.1.0 Clinic Operations

Standard

- 5.1.1 There must be an individual identified as responsible for patient relations, clinical care and clinic administration of the graduate oral and maxillofacial radiology clinic. This director or equivalent must have access to relevant faculty decision-making groups and should have appropriate committee appointments. This individual must have effective working relationships with other administrators.

Documentation Required

Identify the director of the graduate oral and maxillofacial radiology clinic or equivalent at the institution and attach his/her job description. Describe his/her access to relevant faculty decision-making groups. Describe how he/she has effective working relationships with other administrators.

Standard

- 5.1.2 Patient treatment records must be comprehensive and adequate for teaching purposes.

Documentation Required

Provide as an appendix, a copy or screen shot of a blank patient treatment record.

Provide confirmation that patient authorization for his/her chart to be reviewed as part of the accreditation process has been obtained.

5.2.0 Health and Safety Provisions

Standard

- 5.2.1 Written policies and procedures relating to quality assurance to ensure the safe use of ionizing radiation must be in place and be compliant with applicable regulations for radiation hygiene and protection. Mechanisms must be in place to monitor compliance of these policies and protocols by faculty members, staff and residents. The design and construction of radiology facilities must provide adequate protection from ionizing

radiation for the patient, operator and others in close proximity. The program must ensure that it is in compliance with provincial and federal regulations relating to radiation protection. Where provincial or federal regulations are not in force, the program must show evidence that radiography equipment is routinely inspected to ensure the safe use of ionizing radiation, and that the radiology facilities are designed in such a way to ensure that occupational and public exposure is not in excess of the current recommendations of the International Commission on Radiological Protection (ICRP).

In addition, the program must identify a radiation protection officer and have in place a quality assurance program that includes daily monitoring of radiographic quality.

Radiographs must be prescribed based on the specific needs of the patient taking into account the existence of any current radiographs. Radiographs must be exposed solely for diagnostic purposes, not to achieve instructional objectives.

Documentation Required

- a. Attach as an appendix, a copy of the job description of the radiation protection officer.
- b. Provide on-site copies of policies and protocols related to the prescription of radiographs.
- c. Provide an on-site a copy of the quality assurance program used at the institution.
- d. Provide on-site reports of the radiation safety inspections undertaken since the last accreditation survey.

Standard

- 5.2.2 Policies and/or protocols must exist relating to Fire and Safety Procedures, Hazardous Materials and Waste Management, Infection Control and Medical Emergency Procedures. Such policies and/or protocols must be consistent with related elements of the didactic program, related regulation, legislation and bylaws of the various jurisdictions and must be readily available for faculty members, staff and residents. Mechanisms must be in place to monitor compliance of these policies and protocols by faculty members, staff and residents.

Documentation Required

Provide as an appendix, copies of the policies and/or protocols outlined in 5.2.2. Describe how these policies and/or protocols are monitored for faculty members, staff and residents.

Standard

- 5.2.3 Residents, faculty members and appropriate staff must be encouraged to be immunized against and/or tested for infectious diseases, such as mumps, measles, rubella, tuberculosis and hepatitis B prior to contact with patients and/or infectious objects or materials in an effort to minimize the risk to patients and dental personnel. All individuals who provide patient care must follow standards of risk management.

Documentation Required

Describe steps that are taken to ensure compliance with institutional immunization requirements by residents, faculty members and staff against infectious diseases prior to contact with patients.

Standard

- 5.2.4 The program should develop (or adopt provincial policies if applicable) and implement policies and procedures related to individuals who have bloodborne infectious disease(s).

Documentation Required

Provide a copy of the institution's policies and procedures related to faculty members, staff and residents who have bloodborne infectious disease(s).

Standard

- 5.2.5 Residents, faculty members and staff involved with the direct provision of patient care must be certified in basic life support procedures.

Documentation Required

Provide documentation that identifies the process used to monitor that all faculty members, staff and residents are certified in basic life support.

5.3.0 Patient Care and Quality Assurance

Standard

- 5.3.1 Policies and/or protocols must exist relating to the following:

- a. Audit of Patient Care
- b. Collection of Patient Fees
- c. Confidentiality of Patient Information
- d. Consultative Protocols
- e. Informed Consent
- f. Patient Assignment
- g. Patient Continuing and Recall Care
- h. Patient Records
- i. Professional Decorum

Such policies and protocols must be written, consistent with related elements of the didactic program and readily available for the residents, staff and faculty members. Mechanisms must be in place to monitor compliance of these policies and protocols by faculty members, staff and residents.

Documentation Required

Provide as an appendix, copies of the policies and/or protocols outlined in 5.3.1. Describe how these policies and/or protocols are monitored for faculty, staff and residents.

Standard

- 5.3.2 The program must have policies and mechanisms in place that provide quality assurance and education for patients about their specialty care and related treatment needs. Patients accepted for dental specialty care must be advised of the scope of care available at the facility and be appropriately referred for procedures that cannot be provided by the specialty program.

The primacy of total dental care for the patient must be well established in the management of the clinical program, assuring that the rights and best dental interests of the patient are protected. The quality assurance process should ensure that the following are in place:

- a. Primary responsibility for total patient care is formally assigned and documented to a single resident.
- b. Patient-centred, comprehensive care, continuing and recall care.
- c. Patient review policies, procedures, outcomes and corrective measures.
- d. Adverse or ineffective outcomes are subject to routine review.

Documentation Required

Describe quality assurance mechanisms in place within the program. Provide evidence that the quality assurance program supports ongoing improvement in comprehensive patient care.

Standard

- 5.3.3 Treatment undertaken by residents prior to advancement and graduation must be reasonably expected to be beneficial for the health and care of patients.

Documentation Required

Describe mechanisms that ensure that resident educational requirements are beneficial for the health and care of patients.

6.0 RESEARCH AND SCHOLARLY ACTIVITIES

Standard

- 6.1 There must be an appropriate commitment to research activity by faculty members teaching in the oral and maxillofacial radiology program. This responsibility must also involve residents and should have the support of the parent university with respect to finances and facilities. An appropriate balance of faculty member involvement between teaching and

research must exist so that the quality of the program is not compromised. Investigations leading to the improvement of the educational program should be included in such research activities.

CDAC believes that there are many worthy research projects, particularly of a clinical or educational nature, which could be undertaken without major funding from external agencies.

Documentation Required

- a. Identify the research and scholarly activity requirements for residents and identify if a thesis/major paper is required.
- b. Attach as an appendix, a list of the research projects/scientific papers that have been completed by faculty members and graduate residents since the last accreditation survey visit identifying the name of the investigator, and the name, title and affiliation of the staff supervisor.
- c. Attach as an appendix, a list of research affiliations and support mechanisms of the program since the last accreditation survey visit.

7.0 PROGRAM RELATIONSHIPS

7.1.0 Relationships with Other Educational Programs

Standard

- 7.1.1 Where other health science programs and/or baccalaureate/graduate/postgraduate educational programs exist efforts should be made to integrate the didactic and clinical aspects of these programs wherever possible and/or appropriate, in order to foster effective working relationships.

Documentation Required

Describe the program's relationships with other health sciences educational programs that permit residents to develop multidisciplinary working relationships, as appropriate, with other programs and residents.

Standard

- 7.1.2 CDAC recognizes the potential value of faculty-based continuing education programs. Such programs should develop resident awareness and appreciation of the necessity for continuing education as a professional responsibility. The demands of continuing education programs must not be allowed to jeopardize the quality of the program.

Documentation Required

Describe how resident awareness and appreciation of the benefits of a faculty-based continuing education program are fostered. Describe how faculty members provide and/or

participate in continuing education programs.

7.2.0 Relationships with Health Care Facilities and Other Health Care Agencies

Standard

- 7.2.1 The program must have a functional relationship with at least one (1) hospital with a dental service approved by CDAC. This relationship must afford the resident the opportunity to learn protocols, observe working relationships with other health professionals and to provide patient care while participating in the management of the health and social problems of the hospital patient.

Documentation Required

Describe the relationship between the program and area hospitals that have a dental service approved by CDAC. Describe the opportunities for the residents and attach a schedule of their activities.

Standard

- 7.2.2 The program should also develop functional relationships with other institutional health care facilities, community health programs and health departments to establish an environment which prepares residents to provide care for patients in such health care facilities.

Documentation Required

Describe relationships between the program and other institutional health care facilities, community health programs and health departments. Describe how these relationships establish an environment, which prepares residents to provide care for patients in such facilities.

7.3.0 Relationships with Regulatory Authorities and Dental Organizations

Standard

- 7.3.1 Residents must be made aware of the regulatory framework for both dental and specialty practice and of the distinct role of regulatory authorities, provincial/national dental and dental specialty organizations. Faculty members should be encouraged to accept positions of responsibility in such organizations and their contributions should be supported and recognized by the program.

Documentation Required

- a. Describe how residents are made aware of the role of regulatory authorities.
- b. Describe how residents are made aware of the role of provincial/national dental and

- dental specialty organizations.
- c. Describe how faculty members participate in positions in these organizations and how their contributions are supported and recognized by the program.

APPENDIX A Dental Specialty Assessment and Training Program

Accredited dental specialty programs offering a Dental Specialty Assessment and Training Program (DSATP) for dental specialists who graduated from non-accredited programs will be assessed by CDAC. The dental specialty program and the DSATP for dental specialists who graduated from non-accredited programs will be assessed by CDAC conjointly. The accredited dental specialty program will provide the customary documentation in response to the accreditation standards for the specific dental specialty program; and specific additional information will be requested for the DSATP. CDAC will review the accredited dental specialty program's educational approach preparing DSATP candidates.

Introduction

CDAC accredited dental specialty programs may admit dental specialists who graduated from non-accredited programs for assessment and additional education and training. CDAC requires that an accredited dental specialty program offering a DSATP be responsible for the assessment of candidates and all educational components of the program. Accredited dental specialty programs may enter into an affiliation agreement with other Dental Faculties/Schools of Dentistry to provide aspects of the DSATP program. However, the certificate of completion of the DSATP must be granted to successful candidates by the Faculty/School of Dentistry accredited dental specialty program.

The Faculty/School of Dentistry offering a DSATP must advise accepted candidates that Institutional policies and regulations apply to them as candidates in the program and that they have the same rights and responsibilities as other residents in the Institution.

The following documentation in relation to CDAC standards must be provided.

Documentation Required

A1 Institutional Structure

A1.1 Identify the sponsoring Faculty/School of Dentistry and the accredited dental specialty program(s) admitting dental specialists who graduated from non-accredited programs to assess their eligibility for the DSATP.

A1.2 In the event of an affiliation with another Faculty/School of Dentistry; the accredited dental specialty program must provide a copy of the affiliation agreement(s).

A1.3 Identify all sites and affiliated institutions where candidates receive instruction.

A2 Admission to the Dental Specialty Assessment and Training Program

- A2.1 Admission must be based on specific selection criteria. The admissions process must employ valid assessments and measurements to select students who have the capacity to succeed in the program and the dental profession. These assessments and measurements must be established and published prior to the consideration of applicants. The criteria must be readily available to advisors and applicants and be applied equitably during the selection process. The program must be involved in establishing these criteria. Selection criteria should encourage recruitment of a diverse student population with appropriate academic preparation and aptitude.
- A2.2 Describe the admissions process for applicants to be admitted to the DSTAP.
- A2.3 Describe how the applicant's skills in the specific dental specialty are assessed prior to admission into the DSATP.
- A2.4 Complete the following chart for DSATP candidates for the past five (5) years.

Number of candidates who applied to the program.	
Number of applicants admitted.	
Number of candidates who successfully completed the program.	
Number of candidates who passed the NDSE.	

A3 Curriculum

- A3.1 Describe, with examples, the process used to develop a customized plan for educational experiences for a candidate.
- A3.2 Provide an example of a customized educational program. On site, provide further examples of customized educational programs including a description of the ongoing evaluation of the program and any required modifications.

A4 Candidate Evaluation

- A4.1 Describe the process to determine that a candidate has successfully completed the customized plan for educational experiences and is eligible to be awarded the certificate of completion.

A5 Resources

- A5.1 Identify the faculty members involved in the DSATP, and indicate whether they

- have a Faculty appointment and have the appropriate qualifications and experiences necessary to teach the candidates in the program.
- A5.2 Provide evidence that there is sufficient faculty member coverage to provide the individualized program for each candidate.
- A5.3 Demonstrate that the appropriate resources, physical facilities, support staff, and patients are available to offer the program.

